



US CMS Tracker Outer Barrel (TOB)

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Level 2 Manager/US CMS Si Tracker Project

US CMS Silicon Tracker Project Review
September 14, 2000



Announcements

- Next tracker week Jan. 21, 2002 see CMS 2002 calendar:
 - <http://cmsdoc.cern.ch/pictures/cmsorg/02yearlycal.pdf>



General organization and meetings format

Reporting

- Will setup a standard meeting format. Propose the following:
 - Production site reports (FNAL and UCSB)
 - General status reports from the main US production centers. For now this will be concentrated on status of setup or initial module production. Later it will be reports on production status.
 - L3 manager reports
 - All L3 managers should report on the status of their areas of responsibility.
 - I'd like to specifically designate people responsible for maintaining contact with CERN about developments and changes in the project areas. People should present brief summaries of any news in these areas. Areas of relevance with possible names are:
 - Sensor production and testing (Regina)
 - Module production methods including bonding (Lenny, Bill and Dave)
 - Production fixtures, and transportation and handling boxes (Paul and Dave)
 - Test stands and general status of electronics and DAQ (Slawek and Alice)
 - Testing methods: Short, long term, burn-in etc. (Alice and Cecilia)
 - Inspection and Quality Assurance (Paul + ?)
 - Tracker Project issues - e.g. schedule and cost (Joe and Regina)



Si Tracker Group (to be updated)

- Fermilab
 - B. Flaugher, R.Lipton, P.Lukens, P.Rapidis, L. Spiegel, S.Tkaczyk
- Kansas State University
 - T.Bolton, R.Demina,W.kahl,S.Korjenevski,M.Kubantsev,W.Reay, R.Sidwell, N.Stanton
- Northwestern University
 - D. Buchholz
- University of California, Santa Barbara
 - C.Campagnari, J.Incandela
- University of Illinois, Chicago
 - C.Gerber, K.Papageorgiou
- University of Kansas
 - A.Bean, M.Bailey,P.Baringer, X.Zhao
- University of Rochester
 - S.Blusk,A.Hocker,P.Tipton



L3 List (to be updated)

	Institution	Sensor qualification	Frames	APV25	FE hybrids	Gantry (module mounting)	Bonding	Reception & shipping
L2		G.M. Bilei	C. Van Der Velde	J. Hall	U. Goerlach	G. Fiore	A. Honma	project associate
	Bari	-	-	-	-	G. Fiore	P. Tempesta	M. de Palma
	Catania	-	-	-	-	C. Tuve'	-	-
	Firenze	-	-	-	-	-	E. Scarlini	G. Gheri
	Padova	-	-	-	-	A. Kaminsky	M Tessaro	M. Loreti
	Pisa	A. Messineo	A. Basti	-	-	-	F. Bosi	F. Bosi
	Perugia	M. Angarano	-	-	-	M. Biasini	-	M. T. Brunetti
	Torino	-	-	-	-	-	J. Clark	G. Ferrero
	Aachen 1	-	W. Braunschweig	-	-	-	W. Braunschweig	W. Braunschweig
	Aachen 3	-	-	-	-	-	R. Schulte	-
L3	Brussels	-	L. Van Lanker	-	-	L. Van Lancker	-	TBD
	Karlsruhe	F. Hartmann	-	-	-	-	H.J. Simionis	H.J. Simionis
	Lyon	-	-	-	-	R. Haroutunian	-	S. Vanzetto
	Louvain	G. Gregoire	-	-	-	-	-	TBD
	Strasbourg	J. C. Fontaine	-	-	J.D. Berst	-	F. Didierjean	J.D. Berst
	Wien	M. Krammer	-	-	-	TBD	R. Wedenig	TBD
	Zurich	-	-	-	-	-	K. Freudenreich	U. Horisberger
	UK	-	-	M. Reymond	-	-	-	TBD
	USA	-	-	-	-	L. Spiegel	TBD	TBD
	CERN	-	B. Glessing	-	A. Honma	A. Honma	A. Honma	J. Martin



L3 List continued

	Institution	Data Base & trace-ability	Tests			Rod/petal/shel/disk integration	Sub-detector integration
L2	D. Contardo		module (fast)	module (long-term)	rod/petal/shel/disk		
L2	Bari	D. Contardo	S. My	-	-	-	-
	Catania		A. Tricomi	-	-	-	-
	Firenze		C. Civinini	-	-	-	-
	Padova		D. Pantano	-	-	-	-
	Pisa		R. Dell'Orso	P. G. Verdini	P. G. Verdini	F. Raffaelli	E. Focardi
	Perugia		A. Santocchia	-	-	-	-
	Torino		L. Demaria	-	-	-	-
L3	Aachen 1	F. Hartmann	W. Braunschweig	-	-	D. Pandulas	D. Pandulas
	Aachen 3		R. Schulte	R. Schulte	R. Schulte	R. Schulte	
	Brussels		TBD				-
	Karlsruhe		S. Weseler	S. Weseler	P. Bluem	P. Bluem	-
	Lyon		S. Perries	S. Perries	D. Contardo	D. Contardo	D. Contardo
	Louvain		V. Lemaître				-
	Strasbourg		J.M. Brom				-
	Wien		TBD				-
	Zurich		n.n.				-
	UK		-	-	-	-	-
USA	TBD	W. Kahl	A. Bean	C. Gerber	TBD		-
CERN	R. Malina	-	-	D. Abbaneo	D. Abbaneo	A. Onella	



US Group Org. at Baseline

Task	Location	Responsible
Sensor probing	KSU	KSU
Hybrid testing	FNAL	KU,FNAL,UIC
Module assembly	FNAL (USBC)	FNAL (USBC)
Bonding	FNAL (USBC)	FNAL (USBC)
Testing	FNAL (USBC)	KU,FNAL,UIC (USBC)
Inspection	FNAL	Rochester
Rod assembly	FNAL (USBC)	FNAL (USBC)
Cooling setup	FNAL	Rochester
Interlocks	FNAL	Rochester
Quality control	UIC,Northwestern	UIC , Northwestern
Burn in testing	FNAL	KU,FNAL,UIC
Repair	UCSB/FNAL	UCSB/FNAL
Transportation Boxes	FNAL	UCSB, Rochester, KU
Documentation	FNAL (USBC)	FNAL (USBC)



General & Miscellaneous

- Module Construction Web Page: (rec'd Dec. 1)
 - Dear colleagues, many important documents has been added lately to our module construction web page and will be added in the near future. Please keep in eye on

<http://bilei.home.cern.ch/bilei/ModProd/main.html>

- Hybrids status: (as of Nov. 30)
 - The production of M200 hybrids is continuing at DORAZIL (TOB/TEC) and MIPOT (TIB). First prototypes should be available in Strasbourg at the time of the next CMS week in form of few populated hybrids from DORAZIL and few substrates from MIPOT.
 - If all goes well, the production of the 150 TOB/TEC could be done before Xmas and the 50 TIB during January next year, but this is obviously related to the acceptance date of the prototypes.
 - Cost is high. Considering packaged chips technology. Some discussion of using thin FR4 substrates.